



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Glenn G. Strawder

Serial No.: 09/865,696

Filed: 05/29/2001

For: A Method For Monitoring Radiology Machines, Operators and Examinations

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the office actions dated 08/25/2009, please amend as follows:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Before the Patent Board of Appeals and Interferences

Applicant Name: Glenn Gerald Strawder

Serial No.: 09/865,696

Filing Date: 05/29/2001

Invention Title: A Method For Monitoring Radiology Machines, Operators and
Examinations

Examiner Name: Rachel L. Porter

Art Unit: 3626

Document Title: Appeal Brief

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Statement of Real Party of Interest

Mr. Glenn Gerald Strawder is the real party of interest and William D. Hall is the Attorney.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of Claims

All claims have been rejected.

Claims 1-64, 73-76, 78-82 are cancelled.

Claims 65-72, 77, 83-93 stand rejected and are the subject of this appeal.

Status of Amendments

No amendments have been filed subsequent to final rejection.

Background of The Summary of Claimed Subject Matter

It is well settled that simplicity is grounds for support of a patent. For example, the Wright Brothers merely bent the wing of an airplane for take off and Thomas A. Edison just substituted a wire (conductor) that would not burn out so fast in the light bulb.

It is well known that the final result (a processed picture) of an examination using a medical imaging machine can show that the picture has to be retaken due to a mistake (poor quality, wrong view, etc.). What was not well known was whether the nature of a mistake is related to operator performance, patient performance or machine malfunction. It was also not known whether problems involved in taking the picture could be found by a computer. With the Appellant's invention the operator's manipulations are compared to a standard to determine many facts about the mistake, and where during the performance of the examination the mistake was made. Until the Appellant's invention, it was not known that a computer could monitor a medical imaging machine and monitor the operator of the machine, at the same time much less compare what the operator did to what he or she should have done to find the reasons for mistakes. Until the Appellant's invention, it was not known that a computer could help retrain an operator much less strengthen the performance of an operator to reduce or eliminate future mistakes. Until the Appellant's invention, it was not known that a computer could monitor students who are training to become operators of medical imaging machines much less show their instructors (teachers) where during an examination the students meet, exceed and fall short of the standard performance. (Appellant's application: Page 3, line 6-20; Page 5, line 6-19;

Appellant's Declaration: Page 2, line 21, to Page 4, line 16)

Modern medicine has for many years been using medical imaging machines to show body parts and structures beneath the skin. There are different types of medical imaging machines such as x-ray machines, CT scan machines, MRI machines, etc. These medical imaging machines may be used in a wide variety of ways and purposes on different body parts. It is very critical that these medical imaging machines be used correctly to demonstrate the body part or structure under investigation. When medical imaging machines are not used properly, body parts and structures under the skin may not be demonstrated in the manner in which they exist, thereby causing a mis-diagnoses. The way to use the invention's computer on the different body parts may be programmed or built into the computer. According to the Appellant's invention the computer has the latest versions of the current best way for an operator to use a medical imaging machine on a typical patient to perform a specific procedure. The latest version of the best ways to use the machine is compared to the actual ways the operator uses a medical imaging machine. And the proper way and the actual way are compared. In the prior art there is nothing that shows anybody was motivated to double check the performance of the operators of medical imaging machines for accuracy. (Appellant's application: Page 3, line 6-20; Page 13, line 1-24; Appellant's Declaration: Page 2, line 4, to Page 4, line 5)

Summary of Claimed Subject Matter

Claim 65. An apparatus that stores a standard protocol or pattern of events of what an operator should do using a medical imaging machine, then storing at

least one pattern about the operator during the actual performance of an exam, and comparing a standard pattern with at least one actual pattern performed during the exam. (Appellant's application: Page 3, line 6-20; Page 13, line 1-24; Figure 2).

Claim 69. The method of providing a computer for storing a standard protocol or pattern of events of what an operator should do using a medical imaging machine, then storing at least one pattern about the operator during the actual performance of an exam, and comparing a standard pattern with at least one actual pattern performed during the exam.(Appellant's application: Page 3, line 6-20; Page 13, line 1-24; Figure 2).

Claim 77. An apparatus that calls for storing a standard protocol or pattern of events of what an operator should do using a medical imaging machine, then storing at least one pattern about the operator during the actual performance of an exam, and comparing a standard pattern with at least one actual pattern performed during the exam. (Appellant's application: Page 3, line 6-20; Page 13, line 1-24; Figure 2).

There are three (3) means-plus-function clauses in Claim 77.

- 1) Claim 77, lines 5 to 7, is a means-plus-function clause. It is based on specification of Appellant's application: Page 3, line 13-20; Page 13, line 1-24.
- 2) Claim 77, line 8-10 is a means-plus-function clause. It is based on specification of Appellant's application: Page 3, line 13-20; Page 13, line 1-24.
- 3) Claim 77, line 11-22 is a means-plus-function clause. It is based on specification of Appellant's application: Page 3, line 13-20; Page 13, line 1-24.

There are no step-plus-function clauses in any of the Claims.

Ground of Rejection to be Reviewed on Appeal

(1) Appellant's Declaration under 37 CFR 1.132 filed 10/16/08 was held by the Examiner to be insufficient to overcome the rejection of claim 66-72, 77 - based upon Howson, Prince and Dorne as set forth in the last office action because the facts presented regarding applicant's background and experience are not germane to the applied rejection. The Examiner contends that the Appellant's Declaration refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims see MPEP 716.

The Examiner says that when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

(2) Claims 65-68, 83, 84, 87 and 91, 93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(3) Claims 65, 67-69, 71-73, and 76-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howson et al (USPN 5,088,961) in view of Prince (USPN 5,417,213) [claim 65].

(4) Claims 66, 70, 92, 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howson and Prince in view of Dorne (USPN 5,325,293).

Howson et al (USPN 5,088,981)

Howson is a computerized infusion pump (deliver unit). An infusion pump, pumps fluid into the blood stream of a human body. None of the machines on which Appellant's invention is being applied has anything remotely related to an infusion pump. Howson's infusion pump delivers therapeutic agents. Howson teaches a computer that is operationally independent of the delivery unit which establishes coded information for programming of the programmable element while removed from the delivery unit. The programmable element effects independent delivery of the therapeutic agents in various channels that the programmable element controls. No therapeutic agents are involved directly or indirectly with the machines employed by the Appellant's invention. The programmable element is programmed to inject the therapeutic agent to fit the need of individual patients each minute of each day. Howson's programmable delivery unit allows a patient, or an event, to initiate delivery of a therapeutic agent. **Howson does not refer to any medical imaging machine much less refer to a person operating one.**

A reading of Howson's patent col. 6, lines 20-68; col. 8, lines 39-68; and col. 12, lines 13-66 will show that the Examiner's description of Howson is totally and clearly erroneous. Howson does not have any of the elements of Claim 65. For example Claim 65 says, "said computer also storing a second series of steps that set forth what the operator performed during the use of said medical imaging machine used to perform said medical function..." As for the last elements of Claim 65, Howson does not have and I quote, "said computer comparing said first series of steps with said second series of steps."

Prince (USPN 5,417,213)

Prince is a method of injecting an intravenous contrast agent to visualize arteries, distinctly from veins, using a nuclear magnetic resonance imaging machine, (MRI). Prince teaches various methods of injecting the contrast agent in such a way that the arterial contrast agent concentration is substantially higher than the venous and background body tissue for a period of time long enough to acquire the magnetic resonance images needed. Prince injects the contrast agent by using an infusion pump or manually by hand.

A reading of Prince's patent col. 2, lines 35-64; col. 3, lines 5-19; and col. 4, lines 5-26 shows that the Examiner's description of Prince is totally and clearly erroneous.

Prince does not teach any of the elements of the apparatus claims or any of the steps of the method claims on appeal.

Dorne (USPN 5,325,293)

Dorne teaches a method and system for correlating medical procedures into billing codes. Dorne's system allows a physician to plan the performance of a medical procedure in advance and modify the planned procedure after performing the examination and then translating the performed procedure into billing codes to maximize the procedure's bill (col. 3, lines 18-50). Dorne's method comprises generating raw codes associated with planned medical procedures and analyzing the raw codes to generate a set of intermediate codes without altering the raw codes. While Dorne creates the billing codes for the examination that was performed, he does nothing to investigate if the operator performed the examination correctly. While Dorne refers to billing the cost of using a medical

imaging machine he does not show, discuss or make any attempt to determine if the operator performed the examination correctly.

Dorne does not teach any of the elements of the apparatus claims or any of the steps of the method claims on appeal.

The Combination of Howson and Prince

The combination of Howson and Prince is irrelevant. Howson has a computerized infusion pump and Prince has an infusion pump that is used with an MRI machine. The results of combining Howson and Prince produce a computerized infusion pump that is used to visualize an artery more than a vein when using an MRI machine. There is no suggestion or motivation in the prior art to combine Howson and Prince. Combining Howson and Prince is totally lacking in merits. Combining Howson and Prince does not teach any elements of any of the claims.

The Combination of Howson, Prince and Dorne

The combination of Howson, Prince and Dorne is also irrelevant and should not happen. Combining Howson, Prince and Dorne is clearly inadequate for meeting the present invention. Howson has a computerized infusion pump, Prince has an infusion pump that is used with an MRI machine, the results of combining Howson, Prince and Dorne could do no more than produce a computerized infusion pump that is used to visualize an artery more than a vein when using an MRI machine and figuring out a charge for the procedure. There is no suggestion or motivation in the prior art to combine Howson, Prince and Dorne. Combining Howson, Prince and Dorne is totally lacking in merits. Combining Howson, Prince, and Dorne does not teach any elements or step of any of the claims.

Argument

The Declaration under 37 CFR 1.132 filed 10/16/08 is clearly sufficient to overcome the rejection of claim 66-72, 77

Responding to Page 2, paragraph 3 of the final rejection.

The Examiner Erred In Refusing to Consider Appellant's Declaration (See Evidence Appendix Page 33).

The main issue in this case is obviousness which requires an understanding of the views of a person reasonably skilled in the art. The Appellant has had 40 years of experience in the art and his declaration shows that the invention was not obvious to persons of reasonable skill.

It has been well known for many years that medical imaging machines have been used for examining patients for problems. Most medical imaging machines use radiation. Radiation is very useful in imaging body parts but is also dangerous. Monitoring the operators of medical imaging machines to make sure the operators are using them at a very high skill level is critical in preventing patients of all ages and sex from being over exposed to unnecessary radiation. In general, the reason imaging machines are used is to illuminate internal structure of the body, since some of them use radiation, we do not want them to be used improperly and which may cause other problems such as cancer. Also, if an internal structure of the body under investigation is not demonstrated correctly the physician will not make the right diagnosis and the patient will not receive the treatment that is needed. Not only are these medical imaging machines very complex but the way of using them is constantly being improved upon. Moreover, new employees are finishing training and being hired. It is desirable to monitor

both seasoned operators as well as new recruits.

The method for examining a toe is greatly different from examining a human brain, therefore according to Appellant's invention, it is important to have procedures for monitoring all operators for each different body part. Indeed some body parts may require more than one procedure for a particular examination. Also, the same body part such as the chest on different size patients will require different exposure settings from a small size to a larger size to properly image that body part. And therefore, the computer can make a determination on whether or not the operator made the proper adjustment. Often in modern usage there are many operators in a single medical department using individual medical imaging machines performing examinations at the same time. It is impossible for the supervisor to watch each of the operators perform their examinations from start to finish. And for a supervisor to be able to judge whether an operator properly performed their job without the present invention, the supervisor must be present and watching the actual performance of the examination whereas with the invention the computer performs the monitoring instead of the supervisor. With the Appellant's invention the supervisor can quickly determine which of the medical imaging machine operator's performance was improper. The Strawder Declaration teaches the above facts. (The Appellant's Declaration, Page 3, third full paragraph).

Argument to Claims Rejected under 35 U.S.C. 112

Responding to Page 3 to Page 4 of the final rejection.

The following Pages 19-22 answers the Examiner's assertion that several claims are not apparatus claims.

In trying to uphold her rejection, the Examiner reads all of the elements of the claims out of context. Nowhere does the Examiner admit that what she is quoting is in fact something that the computer is programmed to do.

Even if a computer is programmed to perform a method this does not mean that the recital of the computer is a method step.

A computer is a physical apparatus and it makes no difference whether it is programmed to perform a method or to do something else.

Claims 65

The Examiner's statements on Page 3 to Page 4 of the final rejection on their face are incorrect because claim 65 calls for a single computer that has certain information in it, which it acts on. The part that does the work is a computer. Claim 65 calls for the same computer to perform three different things, and therefore clearly is an apparatus claim. Claim 65 does not say that a human hand or human brain does the functions, it states that a computer performs the functions. Example: this is not a case where the human brain is doing the various things that are called for in the claims. A "computer," that has the necessary program built into it is what claim 65 is calling for. (Appellant's application: Page 5, line 6-19, Page 13, line 8-10; Page 13, line 23-24; Page 15, line 9-10).

Claims 67, 68, 83, 87, 91 and 93

The foregoing discussion is applicable to these claims.

Argument to Claims 65, 67, 68, 69, 71, 72, 77 Rejected under 35 U.S.C. 103(a)

Responding to Page 5 to Page 11 of the final rejection.

A medical imaging machine is part of the body of each claim and therefore, the medical imaging machine is a limitation on the scope of the claims. This is confirmed by the last paragraph (on Page 37) of the specification makes it clear what the words “medical imaging machine” mean. Page 37 says:

“The above invention has been described in connection with an x-ray machine, however the broader aspects of this invention apply methods for operating other machines that take a picture of the internal anatomy of a body such as MRI scanners, and CT scanners, Ultrasound machine, etc.”

Thus, the term “medical imaging machine” as used in the claims refers to machines such as x-ray machines, CT scanners, Ultrasound machines, and other machines that make a medical useful image of a part of a human or animal. See also the first sentence in the second paragraph (on Page 3) of the specification makes it clear what the words “medical imaging machine” mean. Page 3 says: “An X-ray machine, C.T. scanner and/or MRI scanner of an institution, for example, may be called upon to make pictures of hundreds of body parts.”

Claim 65

The Examiner reads all of the claims out of context in all office communications. Claim 65 is patentable because it does not read on the Prior Art. Each sentence relating to Howson and Prince that the Examiner makes on Page 5 to Page 11 of her office action is totally wrong and can find no support in the reference. Howson and Prince teach away from the recital of Claim 65.

The Examiner’s description of Howson and Prince is not accurate but even if it is true, neither Howson nor Prince teach “a computer for storing a first series

of steps that an operator should perform when using said medical imaging machine to perform said medical function” (Appellant’s application: Page 3, line 13-14; Page 13, line 1-6). Nowhere does the Examiner show that Howson or Prince teach “said computer also storing a second series of steps that set forth what the operator performed during the use of said medical imaging machine used to perform said medical function” (Appellant’s application: Page 3, line 13-16; Page 13, line 17-22; Figure 2). And, the Examiner does not show that Howson or Prince teach “said computer comparing said first series of steps with said second series of steps.” (Appellant’s application: Page 3, line 17-19; Page 5, line 6-7; Page 13, line 23-24; Page 14, line 15-16).

The following passages of Claim 65 are not in Howson and Prince; Claim 65, line 5 to line 11 calls for, “a computer for storing a first series of steps that an operator should perform when using said medical imaging machine to perform said medical function, said computer also storing a second series of steps that set forth what the operator performed during the use of said medical imaging machine used to perform said medical function, and said computer comparing said first series of steps with said second series of steps.” (Appellant’s application: Page 3, line 13-20; Page 13, line 1-24; Figure 2).

Even if the combination of Howson and Prince is made, the combination does not meet Claim 65. Even if the combination of Howson and Prince is made the combination does not teach any of the elements of Claim 65. And, even if the combination of Howson and Prince is made the combination would not produce the same results as the present invention. The sum of Howson’s parts combined with the sum of Prince’s parts cannot perform the apparatus of any part of Claim 65. The Examiner has not shown proper motivation, or any suggestion for,

combining Howson and Prince.

Claim 67

Nowhere does the Examiner show that Howson or Prince has any of the elements of Claim 67. For example the following passages of Claim 67 are not in Howson and Prince; Claim 67, line 16 to line 20 calls for, “a plurality of medical imaging machines each of which performs a medical function and produces a picture of a body part which said computer compares to at least one of said first series of each of said medical imaging machines with at least one step of said second series of steps for each of said medical imaging machines.” (Appellant’s application: Page 6, line 3-5; Page 35, line 9-11; Figure 1). Claim 67 calls for a medical imaging machine taking a picture of a body part and putting that part in a computer which is not in Howson or Prince. (Appellant’s application: Page 17, line 4 to Page 18, line 23).

Claim 68

Nowhere does the Examiner show that Howson or Prince have any of the elements of Claim 68. For example the following passages of Claim 68 are not in Howson and Prince, Claim 68, line 22 to line 24 calls for, “plural medical imaging machines and plural computers, including at least one computer for each medical imaging machine so that separate operators of said medical imaging machines can be monitored for separate patients at the same time.” (Appellant’s application: Page 6, line 3-5; Page 35, line 9-11; Figure 1).

Claim 69

The Examiner reads all of the claims out of context in all office communications. Claim 69 is patentable because it does not read on the Prior Art. The embodiments and specifications of Howson and Prince teach away from

Claim 69. The Examiner's description of Howson and Prince is not accurate but even if it is true, neither Howson nor Prince teach "providing a computer, storing in said computer a predetermined series of steps for operating said medical imaging machine to perform a medical function" (Appellant's application: Page 3, line 13-14; Page 13, line 1-6). Nowhere does the Examiner show that Howson or Prince teach "entering into said computer the actual series of steps of said operator in operating said medical imaging machine" (Appellant's application: Page 3, line 13-16; Page 13, line 17-22; Figure 2). And, the Examiner does not show that Howson or Prince teach "comparing said predetermined series of steps with said actual series of steps of said operator." (Appellant's application: Page 3, line 17-19; Page 5, line 6-11 and Page 13, line 23-24; Page 14, line 15-16).

The following passages of Claim 69 are not in Howson or Prince; Claim 69, line 4 to line 10 calls for, "providing a computer, storing in said computer a predetermined series of steps for operating said medical imaging machine to perform a medical function, entering into said computer the actual series of steps of said operator in operating said medical imaging machine, and comparing said predetermined series of steps with said actual series of steps of said operator." (Appellant's application: Page 3, line 13-20; Page 13, line 1-24; Figure 2).

Even if the combination of Howson and Prince is made the combination does not meet Claim 69. Even if the combination of Howson and Prince is made the combination does not teach any of the elements of Claim 69. And, even if the combination of Howson and Prince is made the combination would not produce the same results as does Claim 69. The sum of Howson's parts combined with the sum of Prince's parts cannot perform any part of Claim 69. The Examiner has not shown proper motivation, or any suggestion for combining Howson and Prince.

Claim 71

Nowhere does the Examiner show that Howson or Prince have any of the steps of Claim 71. The following passages of Claim 71 are not in Howson and Prince; Claim 71, line 15 to line 20 calls for, “a plurality of medical imaging machines each of which performs a medical function, providing a separate operator for each of said medical imaging machines, with each operator performing a series of steps while operating a machine, and comparing said predetermined series of steps with the actual series of steps of each operator.” (Appellant’s application: Page 6, line 3-5; Page 35, line 9-11; Figure 1).

Claim 72

Nowhere does the Examiner show that Howson or Prince have any of the steps of Claim 72. The following passages of Claim 72 are not in Howson and Prince; Claim 72, line 22 to line 24 calls for, “said computer provides information on procedures performed on each of said medical imaging machine as well as summaries of the operations of all of said medical imaging machines.” (Appellant’s application: Page 6, line 13-20; Page 35, line 9-11; Figure 1).

Claim 77

The Examiner reads all of the claims out of context in all office communications. Claim 77 is patentable because it does not read on the Prior Art. Howson and Prince teach away from Claim 77.

The Examiner’s description of Howson and Prince is not accurate but even if it is true, neither Howson nor Prince teach “a computer, said computer including means for storing at least two predetermined steps that an operator should perform when using said medical imaging machine to take a picture of a body part of a patient,” (Appellant’s application: Page 3, line 13-14; Page 13, line 1-6).

Nowhere does the Examiner show that Howson or Prince teach “said computer including means for receiving and storing at least two of the actual steps that the operator performed during the use of said medical imaging machine. (Appellant’s application: Page 3, line 13-16; Page 13, line 17-22; Figure 2). The Examiner does not show that Howson or Prince teach “said computer also including means for comparing said at least two predetermined steps with said at least two actual steps entered into said computer.”(Appellant’s application: Page 3, line 17-19; Page 5, line 6-11; Page 13, line 23-24; Page 14, line 15-16). Claim 67 calls for a medical imaging machine taking a picture of a body part and putting that part in a computer which is not in Howson or Prince. (Appellant’s application: Page 17, line 4 to Page 18, line 23).

The following passages of Claim 77 are not in Howson and Prince Claim 77, line 4 to line 10 calls for, “a computer, said computer including means for storing at least two predetermined steps that an operator should perform when using said medical imaging machine to take a picture of a body part of a patient, said computer including means for receiving and storing at least two of the actual steps that the operator performed during the use of said medical imaging machine, and said computer also including means for comparing said at least two predetermined steps with said at least two actual steps entered into said computer.” (Appellant’s application: Page 3, line 13-20; Page 13, line 1-24; Figure 2).

Even if the combination of Howson and Prince is made the combination does not teach any of the elements of Claim 77. Even if the combination of Howson and Prince is made the combination would not produce the same results as the present invention. The sum of Howson’s parts combined with the sum of Prince’s parts cannot perform the function of any part of Claim 77. The Examiner

has not shown proper motivation, or any suggestion for, combining Howson and Prince.

Argument to Claims 66, 70, 92 and 93 Rejected under 35 U.S.C. 103(a)

Responding to Page 11 to Page 13 of the final rejection.

Claim 66

The Examiner reads all of the claims out of context in all office communications. Claim 66 is patentable because it does not read on the Prior Art. Howson and Prince in view of Dorne embodiments and specifications teach away from Claim 66. For example the following passages of Claim 66 are not in Howson and Prince; Claim 66, line 13 to line 14 calls for, “computer has an output which sets forth prices computed from the operations performed by the operator of said medical imaging machine.” (Appellant’s application: Page 5, line 15-19; Page 14, line 17 to Page 15, line 4; Page 18, line 18-22; Page 23, line 11-17).

Even if the combination of Howson, Prince and Dorne is made it does not meet Claim 66. Even if the combination of Howson, Prince and Dorne is made the combination would not produce the same results as the present invention. The sum of Howson’s parts if combined with the sum of Prince’s parts combined with the sum of Dorne’s parts do not teach the elements in Claim 66. The Examiner has not shown proper motivation for combining Howson, Prince and Dorne.

Claim 70

Nowhere does the Examiner show that Howson and Prince in view of Dorne have any of the recitals of Claim 70. For example the following passages of Claim 70 are not in Howson, Prince or Dorne, Claim 70, line 11 to line 13 calls for, “said computer computes prices useful, for billing purposes, from the operations of said medical imaging machine..”(Appellant’s application: Page 5, line 15-19; Page 14, line 17 to Page 15, line 4; Page 18, line 18-22; Page 23, line 11-17).

Even if the combination of Howson, Prince and Dorne is made it does not teach any of the recitals of Claim 70. Even if the combination of Howson, Prince and Dorne is made the combination would not produce the same results as the present invention. The Examiner has not shown proper motivation for combining Howson, Prince and Dorne.

Claim 92

Nowhere does the Examiner show that Howson and Prince in view of Dorne have any of the recitals of Claim 92. For example the following passages of Claim 92 are not in Howson, Prince or Dorne, Claim 92, line 4 to line 6 calls for, "said computer stores the physical steps that took place in performing a procedure, and determines data useful in computing the cost of operating said machine." (Appellant's application: Page 5, line 15-19; Page 14, line 17 to Page 15, line 4; Page 18, line 18-22; Page 23, line 11-17).

Even if the combination of Howson, Prince and Dorne is made it does not teach any of the steps of Claim 92. Even if the combination of Howson, Prince and Dorne is made the combination would not produce the same results as the present invention. The Examiner has not shown proper motivation for combining Howson, Prince and Dorne.

Claim 93

Dorne has no teaching as to medical imaging machines and therefore does not have the last two lines of claim 93. (Appellant's application: Page 5, line 15-19; Page 14, line 17 to Page 15, line 4; Page 18, line 18-22; Page 23, line 11-17).

Even if the combination of Howson, Prince and Dorne is made it does not teach any of the recitals of Claim 93. Even if the combination of Howson, Prince and Dorne is made the combination would not produce the same results as the

present invention. The Examiner has not shown proper motivation for combining Howson, Prince and Dorne.

Claims Appendix

Claim 65. An apparatus for monitoring the operations of an operator of a medical imaging machine that performs a medical function, comprising:

a computer for storing a first series of steps that an operator should perform when using said medical imaging machine to perform said medical function,

said computer also storing a second series of steps that set forth what the operator performed during the use of said medical imaging machine used to perform said medical function, and

said computer comparing said first series of steps with said second series of steps.

Claim 66. Apparatus as defined in claim 65, in which said computer has an output which sets forth prices computed from the operations performed by the operator of said medical imaging machine.

Claim 67. Apparatus as defined in claim 65, wherein there are a plurality of medical imaging machines each of which performs a medical function and produces a picture of a body part in which,

said computer comparing at least one step of said first series of steps of each of said medical imaging machines with at least one step of said second series of steps for each of said medical imaging machines.

Claim 68. Apparatus as defined in claim 65, in which there are plural medical imaging machines and plural computers, including at least one computer for each medical imaging machine so that separate operators of said medical imaging machines can be monitored for separate patients at the same time.

Claim 69. The method of monitoring the operations of an operator of a medical imaging machine which gather medical information about a patient, comprising:

providing a computer,
storing in said computer a predetermined series of steps for operating said medical imaging machine to perform a medical function,
entering into said computer the actual series of steps of said operator in operating said medical imaging machine, and
comparing said predetermined series of steps with said actual series of steps of said operator.

Claim 70. The method as defined in claim 69, in which said computer computes prices useful, for billing purposes, for the operations of said medical imaging machine.

Claim 71. The method as defined in claim 69, in which there are a plurality of medical imaging machines each of which performs a medical function,

providing a separate operator for each of said medical imaging machines, with each operator performing a series of steps while operating a machine, and
comparing said predetermined series of steps with the actual series of steps of each operator.

Claim 72. The method as defined in claim 71, in which said computer provides information on procedures performed on each of said medical imaging machines as well as summaries of the operations of all of said medical imaging machines.

Claim 77. An apparatus for monitoring the operations of an operator of a medical imaging machine to take a picture of a body part of a patient, comprising:

a computer,
said computer including means for storing at least two predetermined steps that an operator should perform when using said medical imaging machine to take a picture of a body part of a patient,

said computer including means for receiving and storing at least two of the actual steps that the operator should perform when using said medical imaging machine to take a picture of a body part of a patient, and

said computer also including means for comparing said at least two predetermined steps with said at least two actual steps entered into said computer.

Claim 83. The apparatus as defined in claim 65, in which said first series of steps includes the manipulations an operator should perform in performing said medical function,

said second series of steps including the manipulations performed by said operator in using said medical imaging machine.

Claim 84. The apparatus as defined in claim 65, in which said first series of steps includes the manipulations of the patient which should be performed during said medical procedure, said second series of steps including actual manipulations of the patient during said medical procedure.

Claim 85. The method as defined in claim 69, in which said first named series of steps includes the manipulations the operator should perform in using the medical imaging machine.

Claim 86. The method as defined in claim 69, in which said computer stores as part of said predetermined series of steps the operator's manipulations of the patient which should be performed as part of said medical function,

said actual series of steps including the operator's actual manipulations of the patient, said computer also computing at least some part of the cost of some part of the medical procedure performed.

Claim 87. The apparatus as defined in claim 65, in which said computer stores a signal that represents the operations of the operator.

Claim 88. The method as defined in claim 69, in which said computer has more than one stored signal which represents the operations of the operator during the performance of the medical procedure.

Claim 89. The apparatus as defined in claim 77, in which said computer stores signals representing the operator's operations during the medical procedure.

Claim 90. The method as defined in claim 69, in which said computer prints out the results of said computer comparison of said predetermined series of steps with said actual series of steps along with pricing data relating the said operation.

Claim 91. The apparatus as defined in claim 65, in which said computer compares the cost of performing said first series of steps with said second series of steps.

Claim 92. The method as defined in claim 69, in which said computer stores the physical steps that took place in performing a procedure, and determines data useful in computing the cost of operating said machine.

Claim 93. The apparatus as defined in claim 77, in which said computer stores the physical steps that took place in performing a procedure, and determines data useful in computing the cost of operating said machine.

Evidence Appendix

PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Glenn G. Strawder

Serial No.: 09/865,696

Filed: 05/29/2001

For: A Method For Monitoring Radiology Machines, Operators and Examinations

DECLARATION OF GLENN G. STRAWDER

Honorable Commissioner of Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

I am the applicant.

I have worked in the medical field of Radiology for over 38 years. I have worked in large to small hospitals, medical clinics and private physicians offices in many states across this country. Working for these various facilities was an enormous educational benefit.

I have worked at Highland General Hospital, Merritt Hospital, Peralta Hospital and San Francisco General Hospital in California, Deaconess Medical Center and the University of Washington Medical Center in Washington, Flagstaff Medical Center and Phoenix Baptist Hospital in Arizona, University of Colorado Hospital in Denver Colorado, Meharry Medical Center and Nashville Baptist Hospital in Tennessee, Bethany Methodist and Cook County Medical Center in Chicago, Savannah Memorial University Medical Center in Georgia, Holy Cross Hospital and Montgomery Hospital in Maryland, the Washington Hospital Center and Georgetown University Hospital in Washington D.C. and J. T. Mather Memorial Hospital on Long Island, New York.

In my career, I have worked as a staff technologist, a senior technologist, a special procedure technologist, CT Technologist and several levels of management such as assistant chief of the radiology department.

In my experiences, all across this country (as in most jobs) some x-ray technologists can perform their duties above the standard level, some at the standard level and some below the standard level.

In the field of Radiologic Technology, sooner or later every x-ray technologist one makes a mistake and must retake one or more of the pictures in an examination. Since radiation is the primary source used in radiology, retaking a picture whether it is due to the technologist error or the patient for many times a patient will breathe or move during the taking of a picture and thereby obscure the imaging. The additional exposure of radiation is harmful to the patient. Also, since each picture requires the use of more materials (supplies) and time added to the exam, the cost to retake a picture adds to the high cost of healthcare. The average cost to retake one x-ray picture is over \$7.50. That's \$1 for the film, \$1 for the wear and tear of the equipment used, \$1.50 to process (develop) the film, 15 additional minutes or \$4 to \$7 added to the examination of the staff technologist time (average staff technologist salary in the Washington D.C. Metropolitan area is over \$20/hr) not to mention the additional time of the Radiologist to read the retake picture.

When I serviced as the assistant chief of the Radiology Department at J. T. Mather Memorial Hospital in Port Jefferson, Long Island, N.Y., I had a day staff of about 6 technologists back in the 70's (this number as almost double now) and could not watch any of them perform any entire examinations. On average, during an eight hour period (the day shift) 60 to 80 x-ray examinations were performed .

This does not include portable x-rays or examinations in other modalities such as special procedures, CT Scan, etc. The average x-ray examination requires 3 pictures or views (AP, oblique and lateral). Out of 180 to 240 x-ray pictures per day shift, approximately 15% or 27 to 36 pictures had to be retaken. That's a substantial amount of money added to the daily cost to do business and a substantial amount of extra radiation given to patients. The above percentage of error also applied to the other eight hour two shifts per day, the weekend 24 hour coverage of the hospital and the other modalities of Radiology.

If I did not know (which was the case most of the time since I had many duties) that a technologist made an error, the error without correction would often be repeated daily over and over again (since most workers do not tell management that they are making the same error over and over again).

No one has solved this very cost and potential dangerous problem today. There is no present way of checking the proficiency of operators of medical imaging machines other than to have the supervisor stand directly behind the operator when running the machine, which is too costly, and time consuming.

With my invention the various steps of an operator will be checked against a standard set of steps and any errors are determined by the computer.

When a supervisor of a medical imaging department reviews my invention's output he or she will find not just the error that one of their staff technologist has made but the actual step or steps that were not properly done during the examination where the error was made and he or she can direct a rerun to thereby make sure that the patient gets a correct result. Also, my invention allows the supervisor to monitor the x-ray technologist during each examination without being present and see where in the examination they are having problems

performing their duties.

My invention allows supervisors to know which particular examination an operator has problems with and to pinpoint the exact step or steps of that examination that the operator is having problems with so that they can target the step or steps for retraining.

My invention monitors all re-training efforts of management to see if more training is necessary.

My invention goes even further and is the easiest and most accurate way for a Radiology Clinical Instructor to monitor the skill & performance levels of a Student Radiologic Technologist. My invention will monitor each student's performance during each examination giving the Clinical Instructors the data that shows which of the students exceed, meet or falls short of their standard when they perform an exam. This system not only shows the Clinical Instructors each student's strength and weaknesses during an exam but also monitors the success of any re-training by the Clinical Instructors to strengthen or eliminate a weakness in the student's performance.

I, Glenn G. Strawder make this declaration under the penalties of perjury.

A handwritten signature in cursive script, appearing to read 'Glenn G. Strawder', is written over a horizontal line.

Glenn G. Strawder

Related Proceedings Appendix

Respectfully,

A handwritten signature in black ink, appearing to read "William D. Hall". The signature is fluid and cursive, with a large, sweeping initial "W".

William D. Hall
Attorney for Applicant
Register 14, 311

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